II. That for this reason, on May 29, 2009, joint and several Notices of Administrative Penalty 5882 to 5884 and 5893 were issued against the Norberto Odebrecht - Alslom - Va Tech Consortium, legal representative, contractor of the consulting service for the audit and former officers of Hidropastaza S.A., having been legally notified in the manner and on the dates shown below, informing them of the basis for the observation and granting them a period of sixty days in accordance with Article 56, Paragraph 1, of the Organic Law of the Office of the Comptroller General of the State, in order for them to answer and present the pertinent evidence in their defense:

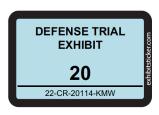
Notice Number and Names	Notificación	dates
5882		
Norberto Odebrecht- Alstom - Va Tech.	Published in the "Hoy" newspaper	07/16/2009
5883 Fumas Association -	In person	06/09/2009
Integral 5884 Marco Antonio Narváez	In person	06/09/2009
<b>Pinto</b> 5893		
Germán Bolivar Anda Naranjo	In person	06/15/2209

**II.** That within the legal term, the indicated persons answered to the Notices of Administrative Penalty by means of communications sent to the Office of the Comptroller General of the State, according to the following details:

5882	Date	Communication
Norberto Odebtecht -		
Alstom - Va Tech Consortium	09/21/2009	058091
	07/21/2009	026260
	09/18/2009	058091
	09/18/2009	N/A

The Construction Consortium, with official letter No. CNO-041-2009 dated September 18, 2009, based on the civil liability imputed against it, made a description of the same, which for the purposes of this analysis is described as follows:

"It did not perform the optimization of the cooling water system, considering the geological-volcanic risks and their influence on the increase of sediments in the Rio Pastaza, in breach of the provisions of Section 3.2 "Optimization Study", of the EPC Contract.



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- Failure to place the filtration mesh that retains the suspended particles identified in paragraph 2.2.1 "Water conditions" (fine sand with particles of 40 to 150 microns), in contravention of the provisions of paragraph 6.4.5 of the mechanical specifications, which establishes that the water filters, in accordance with specification 6.4.2, will have a filtration of 150 microns, while the selected filter uses a filter mesh of 760 microns that allows the passage of all suspended particles carried by the water of the Rio Pastaza.
- Placed the water intake at the inlet of the snails laterally at a height of 1.60 m., not complying with the provisions of paragraph 6.4.3. -Water intake at the snail inlet", which establishes that the water intake shall be located at the top of the pipe, downstream of the butterfly valve obturator.
- Installed equipment that generates a pressure of O.7 MPa (7 bar) to unclog the water inlet grates, in violation of the provisions of Paragraph 6.4.5 "Snail water filters", which establishes that the cleaning pressure of the grids shall be 2.2 MPa, equivalent to 22 bar.
- In the design plan of the Cooling Water System, SFR-DS8PCECMSA 003, in Exhibit 1, Volume 6; "Plans" of the Second Modification to the Concession Contract, it is established that motorized valves will be installed before the filters; by not considering the conditions of the Rio Pastaza's sediment dragging, it made an inadequate choice of the gate valves".

#### The CEM further states that:

"Given the foregoing, the lack of compliance with the contractual technical specifications by the construction consortium resulted in damages to the cooling water system and the seal of the hydroelectric power plant, causing economic damage to the entity in the amount of the Notice of Administrative Penalty, whose demonstration is shown in Exhibit 1 attached".

#### Contract specifications.

With respect to these observations, it is worth first analyzing the content of the contract documents and the Technical Specifications on the basis of which the basic design was detailed, and the equipment was supplied. INECEL's basic design contemplates a cooling water system composed of two circuits, the first fed by water from the nearby streams located approximately 300 m from the cable well entrance, from which a flow of 50 l/s would be used to add to the flow coming from the seepage (5 to 10 l/s). This circuit would be used to cool the most delicate and important equipment for the operation of the plant, such as the generator and turbine bearings and the shaft seal. It is worth noting that these waters are clean, with a minimum sediment content and significantly less contaminated than the waters of the Rio Pastaza. The second circuit takes the water from the pressure pipe after the inlet butterfly valve and passes it through

an automatic filter and supplies the generator heat exchangers and transformers. Both circuits are interconnected so that the bearings can be cooled by water from the Rio Pastaza in the event of a water shortage in the streams and infiltrations.

Thus, pages M6-1 to M6-7 of Volume III of the technical specifications state that:

"For the supply of cooling water for transformers, bearings, regulators and compressors, seal water, drinking water, fire water and service water, there are three different sources: A collection from nearby streams, filtrations from the cavern and intakes in the turbine inlet pipe to the turbine shells. For the supply of cooling water to the generators, only snail intakes are available.

The water to be turbined comes from the discharge of the Agoyán power plant plus the contribution of the Rio Verde. Agoyán turbines the desanded water from the Rio Pastaza. A physical-chemical analysis of a water sample is included in the General Technical Specifications, showing a high concentration of suspended solids.

Water from the creeks will be used for all services, except for cooling the generators, for which it is insufficient. The water from seepage due to its good quality...".

It is worth noting the differences that exist between the predicted characteristics of the Rio Pastaza water and those experienced during the first year of operation of the plant, as detailed in section III of this document.

Section M6-6.3 General Technical Characteristics states that:

"... The intake of the snails shall be located in each group after the butterfly valve. It is foreseen to clean the grids of these intakes, in case of obstruction, by means of compressed air. The collected water passes through rotary filters in parallel and pressure reducing valves with their respective safety valves with discharge to the drainage well of the plant, if the pressure is lower than that required for direct evacuation to the drainage gallery. The filtered water, with a flow rate that varies from approximately 100 l/s to 400 l/s, depending on the number of units in operation and with pressure reduced to O.6 MPa, is conveyed to the generator coolers and, additionally, to the cooling of common equipment, bearings, regulators and seals.

Chillers must be sized for 0.6 MPa pressure or will install appropriate reducing valves."

Section M6 - 6.4.2. Rotary filter for stream water indicates:

"Automatic backwash with stainless steel valve electrically operated by timer and plugging switch. The set will be completed with manual inlet, outlet and in parallel, gate valves

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for filter maintenance and a control cabinet (...). The filter will be for the capacity to be defined during the executive project; with a filtering of 150 micrometers."

It should be noted that the water feeding this circuit and the filtering requirements in this case are different from those corresponding to the cooling circuit of the generator and transformer heat exchangers, since the latter is fed by water coming from the pressure pipe.

In turn, Section M6 - 6.4.3 Snail Inlet Water Intake states that:

"Water intakes shall be made on both units in a similar manner downstream of the butterfly valve plug and at the top to reduce sediment ingress. A valve will be provided at each intake. [These are] the necessary elements to inject pressurized air to unclog the screens if a decrease in flow and/or pressure is detected. Compressed air will be used, from a 2.2 MPa motor compressor.

In normal operation both outlets are open, reducing the risk of clogging.

Finally, Section M6 - 6.4.6 Snail Water Filters provides that: "The set of consists of two automatic rotary filters of similar characteristics to those described in 6.4.2, but of greater capacity since each one will be designed for the total flow necessary for cooling all the elements and equipment of the two units."

According to the administered parties: "As has been demonstrated in section III of this document, the large amount of sediments that occurred during the first year of operation of the Plant affected, among other aspects, the operation of the main filter, which was not designed for this overload, since Hidropastaza operated the filter at the same time that its backwash was kept in permanent operation (the cleaning brooms operated without stops). This fact also affected the other components of the equipment and the system at the points where there is flow control or pressure reduction.

During maintenance inspections, taking advantage of Agóyán's frequent shutdowns to wash the reservoir, it was possible to verify the wear also caused by the poor water quality in valves FV001 and FV002, whose speed reducer was damaged after operating under these extreme conditions, and in valve PCV003, whose obturator was worn out, preventing the control of the pressure reduction.

The snail cooling water system installed fully complies with the basic contractual requirements of the EPC Contract signed with Hidropastaza, as well as with the Bidding Terms and Conditions and the provisions of Addendum No. 4 of the EPC Contract.

In this part of the present document, we will analyze each of the questions raised by the CEM in the same order in which they have been raised, that is:

- Project optimization and approval by Hidropastaza.
- Consortium design according to the contract specifications:
  - Filter netting
  - Location of water intake
  - System pressure to unclog the grids
  - Gate valves
  - o .Acknowledgement by Hidropastaza that the damage was caused by sediment.
  - Legal aspects.

#### Project optimization and Hidropastaza's approval.

As already stated in this document, the optimization of the Project is based on the Basic Design, which is constant in the pre-contractual documents submitted by the former INECEL during the bidding process for the concession and construction of the Project and ratified by CONELEC, so that these are the designs that later became part of the Concession Contract between Hidropastaza S.A. and the Ecuadorian State, represented by CONELEC.

This basic design, which is an integral part of the Concession Contract, was also incorporated into the construction contract signed between Hidropastaza S.A. and the Construction Consortium.

Likewise, the construction contract entered between Hidropastaza S.A., and the Construction Consortium has as its essential purpose the detailing, supply and construction of the basic design provided by the Grantor for the execution of the San Francisco Project.

Section 3.1 of the construction contract states that:

"The scope of work (hereinafter the "Work" or the "Works") for the WORKS shall include the detail engineering of the Basic Project, the supply, assembly, construction and testing, commissioning, and start-up of the WORKS. The Works shall be developed in accordance with: (i) the Basic Project, (ii) the Project Optimization defined in Section 3.2, (iii) the changes or improvements agreed between the Parties pursuant to Section 8 of this Contract, if any, (iv) the Specifications included in the Concession Contract, and (v) the Ecuadorian or other applicable norms and standards agreed between the Consortium and the Concessionaire."

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"It is important to emphasize again that no change, modification and/or optimization under the Construction Contract could be implemented without the approval and authorization of CONELEC and Hidropastaza S.A. in its capacity as Project Grantor and representative of the Ecuadorian State in the case of the former, and as Project Concessionaire in the case of the latter. All the adjustments, designs and details of the equipment supplied were made known to and approved by the Concessionaire Hidropastaza, as stated on page 24 of the Provisional Results Communication (Official Letter No. 24107-DIAPA of September 23, 2008) and page 77 of Report DIAPA-0039-2008, which textually states the following:

"The construction consortium, through Odebrecht's Engineering Department, <u>sent thirty communications in which it presented diagrams</u>, construction details, technical specifications of equipment and made corrections, <u>clarifications and presented the definitive documents of the cooling water system</u> (initial document No. OEC/PHSF/GING/0139/2006 of February 2, 2006, through final document No. OEC/PHSF/GING/1304/2006 of December 11, 2006); documents that were observed and approved by Hidropastaza S.A., by means of official letters No. HP-0423-2006 to No. HP-2139-2006, signed by its Chief Executive Officer".

"In addition to these communications, which all correspond to the year 2006, in 2005 other correspondence was sent in which the Construction Consortium and Hidropastaza defined and agreed on the characteristics of the Cooling Water System supplied, in accordance with the specifications and plans and with the knowledge and approval of the Concessionaire and the Grantor.

"Regarding Project Optimization, Section 6.7 of the Concession Contract states the following:

"6.7 Optimization of the Basic Design: The Concessionaire is authorized to make Optimizations to the Basic Design made by INECEL, for which it may increase, modify or eliminate the different parts of the work that make up the Basic Project, subject to CONELEC's approval, always maintaining the basic concept of the Power Plant. In the same way, the Concessionaire will be able to introduce improvements or changes to the technical specifications of the materials and equipment originally planned."

"As we have already indicated, the basic design and specifications are provided by the Grantor, the optimization of the project is an option of the Concessionaire, has specific purposes and is subject to the prior approval of the Grantor.

"The purpose of the optimization was not to reanalyze the hydrological and sedimentological parameters provided in the bidding conditions, since these studies were detailed and long-term studies conducted by INECEL, and their updating would have required new studies whose execution time was not contemplated in the contractual schedule or in the scope of the works to be developed by the Construction Consortium. Nor was the purpose of the project optimization to carry out a total redesign of the works to face any type of subsequent and unforeseeable force majeure event, such as the volcanic activity registered during the first year of operation of the Power Plant.

"In this document we have described the specific scope of the Project optimization studies, studies that did not include the redesign of the works based on the pre-existing sedimentological or volcanic conditions of the area, as these conditions were already defined in the pre-contractual documents based on detailed studies developed over many years, let alone future conditions, as these were absolutely unpredictable.

"In August 2004, CONELEC and Hidropastaza signed a Second Modification, which maintained the design of the cooling water system foreseen in the Basic Design of the Bidding and, likewise, when Addendum No. 4 to the Construction Contract was signed, the specifications regarding the cooling water system were not modified, nor were the specifications regarding the cooling water system, nor were those regarding the water quality of the Rio Pastaza, but rather ratifies those specified in INECEL's Bid even when the Agoyán Plant was already in operation, so that, if Hidropastaza had had more updated information, it should have provided it or warned about the new conditions;

"With respect to the characteristics of the water, this document has been extensively discussed on the subject; therefore, all the considerations raised therein are applicable to the Cooling Water System and the damages suffered by it due to the unforeseeable conditions and force majeure to which the Plant was subjected during its first year of operation and concomitant with the extraordinary emergency experienced repeatedly in the Project area during 2006, 2007 and 2008.

The imputed Notice of Administrative Penalty could only have been generated in the event that the Grantor had required that, as part of the optimization, the Construction Consortium redesign the cooling water system, which was not the case, since its adoption was implemented after having the corresponding approvals from each of said entities".

Therefore, it is not understood that, having developed the Cooling Water System in accordance with INECEL's Basic Design, having submitted it to the Concessionaire and the Grantor for approval, and having obtained such approval, it is now intended to impute to it the damages suffered due to unforeseeable events of force majeure concomitant with the extraordinary emergency repeatedly experienced in the Project area during 2006, 2007 and 2008".

"Regarding the damages experienced in this system after commissioning, they are due to the unforeseeable increase of suspended solids in the Rio Pastaza as a result of the activity of the Tungurahua volcano, which were subsequently dragged to the Rio Pastaza by the significant rainfall. The data presented in Section III of this document are reliable and leave no room for doubt about the changes experienced in water quality, nor about the extraordinary emergency situation experienced repeatedly in the Project area during 2006, 2007 and 2008".

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"So much so that... Asociación Furnas-Integral, in its electromechanical assembly report N°.ASFLSF.006M.2007-R0 of June 2007 states in Paragraph 8.6.6.1 that:

"During the period from April 26 to May 25, 2007, due to the poor water quality of the Rio Pastaza, there were difficulties in the operation of Valves FV 001, FV 002 and in the drainage valves of the Cooling Water Filters".

The optimization of the project had a defined and agreed scope between the Parties that did not include the introduction of changes or improvements in the cooling water system, since the information provided in the Bidding Terms and Conditions by the former INECEL was considered complete and consistent with reality":

"On the other hand, the detailing of the design and construction of the works was based on the conditions foreseen by INECEL and set forth in the technical specifications of the project, being that such conditions suffered an extraordinary variation during the first year of operation of the Power Plant, a variation that could not have been reasonably foreseen or quantified beforehand by the construction Consortium, since it corresponds to an unforeseeable event of force majeure..."

"...the water characteristics and operating conditions of the creek water filters are absolutely different from those of the snail water filters."

"As already stated, Section 6.4.2 of the technical specifications refers to the rotary filters to be used for the water intakes located in the creeks, while Section 6.4.5 relates to the filters for the water coming from the snails, which should be **similar**, but obviously can never be the same, since the former are filters for the much cleaner water coming from the creeks and which feed the most delicate parts of the cooling and sealing system".

"Instead; the filter used for the snail water indicated in 6.4.5, is designed to filter the water with all kinds of impurities coming from the pressure piping for cooling less delicate equipment."

"Therefore, the use of "similar" equipment as mentioned in paragraph 6.4.5 of the specifications refers to the conceptual design of the filter, but does not imply identical characteristics of all its elements, since the conditions of the water to be filtered and the requirements of the equipment it feeds are different, as was clarified in the technical meeting held with Hidropastaza on May 19, 2005 and subsequently through countless communications, and approvals of drawings, designs and technical information submitted between the Parties".

The self-cleaning filters for the cooling circuits of generators and transformers are those usually used for this function in all types of hydroelectric power plants, within the design parameters established in the specifications indicated in the INECEL Request for Bids and in

Addendum 4 of the EPC Contract Exhibit 4 - Volume 4, Section M6 that reproduce the original specifications of the INECEL project within the following design parameters:

m<sup>3</sup> /hour

Normal use

Constant flow rate to be filtered 500

Suspended solids:

normal 150 ppm high 400 ppm exceptional 1700 ppm

Emergency use (to feed the 2 units)

Constant flow to be filtered: 1000 m³ /hour Suspended solids: 150 ppm

#### Consortium design according to contractual specifications

#### a. Filter mesh

"The 760 micron filter mesh is suitable for generators and transformer cooler water whose flow paths range from 8" to 3" in diameter. In fact, filters such as these are commonly used in power plant cooling water systems.

Since the function of these filters is to prevent the passage of macro impurities, mineral or organic, such as clay lumps, plants, etc., eventually, during the normal filtration process, the retained material itself generates a much thinner filtering layer (slurry) than the mesh itself. When the slurry is formed, it is the filter media and the screen acts only as a support. When the pressure drop across the filter reaches the set value, the backwash cycle is initiated, removing the layer of filtered material.

Some elements dragged by water, such as plastics, glass jars, bottles, pieces of wood, etc., that have passed through the intake screen may reach the inside of the filter and clog the mechanism, as it was not designed to separate these objects.

If a 150 micron mesh is used in the relatively dirty snail water, as has been suggested, it would aggravate the clogging conditions of the system due to the rapid growth of the slurry.

The mesh supplied by the Construction Consortium complies with the technical specifications, since the characteristics of the cooling water coming from the streams (used in the cooling system of the bearings and seals) are not equal to the characteristics of the cooling water coming from the snails (used in the cooling system of the generator heat exchangers and transformers). It has not been demonstrated that the use of a finer mesh would have prevented the occurrence of the problems that have occurred, given the significant increase of suspended solids in the water to be turbined during the first year of operation of the plant.

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#### b. Location of the water inlet

As with other aspects of the San Francisco Hydroelectric Project that have been incorrectly questioned in the reports prepared by CGE, the position of the Construction Consortium with respect to this issue is that the adjustments and details related to the location of the water intakes were duly and timely submitted to the Concessionaire for consideration and approved by it throughout the construction process.

Regardless of the fact that the change in the position of the intake was duly approved by Hidropastaza according to Official Notices HP-0490 2005 dated April 30, 2005 and HP-0850-2005 dated May 30, 2005, in order to analyze the phenomenon itself, it is necessary to consider the basic principles of engineering and design related to the flow of water in these intakes.

Perry's Chemical Engineers Handbook, referring to the problem of sedimentation in pipelines, states:

"Undoubtedly, sedimentation of suspended particles is one of the problems of horizontal circulation through conduits of fluids with suspended solids.

- Cases of rapid sedimentation usually occur in particles larger than 0.01 inch (0.25 mm).
- Particles of 0.002 inches or less (51 microns) easily remain in suspension.
- Solids may remain in suspension,1 when the fluid velocity is high enough to be in a turbulent regime, in particle sizes smaller than 1/8 inch (3 mm)."

As can be seen, the first two points refer to liquid at standstill or at very low velocity (laminar regime), while the third case is applicable to the water of the snail intakes, which, due to the velocity of the water, undergoes a turbulent regime flow (Reynolds No. =  $22 \times 10^{\circ}$ ) ensuring an energetic uniformization of the liquid mass due to the formation of generalized vortices, multiplying the velocity.

Therefore, at that flow rate, there simply will not be any vertical gradient in suspended solids concentration, and hence, the concentration of suspended solids will not be improved in the slightest by shifting the intake to the top of the conduit.

The installation point of the water intake for the cooling system of the generators and transformer is technically adequate, since trapped air and supernatant objects can be found in the upper part. The assertion that any of the damage suffered by the Cooling Water System may have been caused by the location of the respective intakes lacks any technical basis.

#### c. System pressure to unclog the grids.

The originally planned system contemplated the installation of a cleaning system that would operate at a pressure of 2.2 MPa or 22 bar, in parallel and simultaneously with the operation of the generation units. Such a system was discarded because the injection of air at that pressure, with the units in operation, could reach the turbines and produce cavitation.

For this reason, during the process of detailing the basic design, supply and construction, the Construction Consortium made a well-founded proposal to supply the screen cleaning system with a pressure of O.7 MPa, 7 bar, sufficient to carry out this operation with greater safety conditions, that is, with the units stopped and the butterfly valves closed in order to avoid the aforementioned risks of cavitation in the machines.

According to the system proposed and approved by Hidropastaza, the intake has a cleaning air injection system with a pressure of 7 bar to unclog the grids, which is enough to unclog the grids in stopped conditions, closed butterfly valve, closed FV001 or FV002 valves and ¾" ball valve for open air, not being necessary to empty the pressure piping, which is a system that in any case presents safer operating conditions. This concept is present in the Basic Flowchart SFR-DS4PCE-CMSA-003 and in the SFRR-PCEFJ5-GESA-002 diagram, approved by Hidropastaza, through Official Letter No. HP-1762-2006.

The pressure cleaning system for the grids is in accordance with the detailed design submitted by the Construction Consortium and approved by Hidropastaza, and the design of this system is safer because it avoids the risk of air being injected into the units in operation and causing cavitation problems in them.

#### d. Gate valves

The 14" ball valves supplied by Constructor Consortium according to the designs and details approved by Hidropastaza are commonly used in these water installations; even in much larger sizes, they work efficiently in high responsibility tasks such as guard valves in pressure pipelines.

This type of valve allows a balanced and vibration-free closing and can be considered as a correct choice as stated in the Contract specifications for the specified water conditions. In the circumstances given in the period 2007-2008, the exposure to large quantities of sludge that are introduced in confined spaces of the sealing system and in the channel of the sealing ball, make this valve work completely outside its intended use and to work improperly. In this context, and as requested in the meetings in August 2007, Alstom replaced these valves with knife gate valves with special seals coated with electrodeposited hard metal (Stellile), which are common for high-pressure and abrasive slurries in oil extraction.

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Although the valves supplied are adequate for the type of service and water conditions foreseen in the technical specifications, the presence of suspended solids in extraordinary quantities made it necessary to replace them, which was done by the Construction Consortium at Hidropastaza S.A.'s request, in a meeting held on August 14 and 15, 2007, minutes attached, in which all those present came to the conclusion that the reason for the malfunctioning of the valves was the excessive sediments carried by the Rio Pastaza. Therefore, the Chief Executive Officer of Hidropastaza S.A., through Official Letter No. HP-1268-2007 requests authorization to the Chairman of the Board of Hidropastaza SA. for the purchase of these valves, and in same states the following:

"2) Cooling System. Considering the substantial increase in the amount of sediment in the turbined water at the San Francisco Power Plant, sediment product of the washing of the slopes where the material that the Tungurahua Volcano expelled in its last eruption occurred on August 16, 2006 was deposited, the operation of the inlet valve to the filter of the gwater system has been compromised in its automatic operation, which is causing a manual operation of the cooling system, which is not recommended. This is not recommended, therefore, we held a technical meeting with the suppliers of the electromechanical equipment of the San Francisco Power Plant on August 14 and 15, 2007,...."

Therefore, Hidropastaza S.A. acquired and installed the valves, and thus the observation was solved, despite the fact that, as mentioned above, their malfunction was due to extreme operating conditions caused by unforeseeable events of force majeure concomitant with the extraordinary emergency experienced repeatedly in the Project area during 2006, 2007 and 2008.

## 4. Acknowledgement by Hidropastaza that the damage was caused by sediments.

"The detailing, supply and construction of the SAE was carried out in accordance with INECEL's basic design specifications, and each of its details was always subject to the review and approval of Concessionaire Hidropastaza."

The administrators expose:

"On the other hand, it is pertinent to analyze some of the issues addressed in the report and presentation made by Ingeconsult Cia. Ltda. in mid-2008, in which it is concluded, among other aspects, that:

Debris and sediment have affected the equipment causing stoppages. Thus, Ingeconsult agrees with what the Consortium has been demonstrating, i.e., that the sediments and debris brought by the river water were the cause of the damage in question. Furthermore, it is misleading to associate the shutdown of the Plant with the Cooling Water System, since the System was designed so that the two units can operate with only one of the water circuits serving the two Generating Units.

Causes of the problem: high suspended sediment content, very fine granulometry, large floating debris turbined in Agoyán passes through screens, the filter system provided for in the basic design by INECEL does not solve the problem.

High sediment content: 2008 analysis shows higher values, sediments come from the upper basin, volcano lavas may have increased sediments in the upper basin, ...

Hidropastaza has acknowledged compliance with the technical specifications and has accepted that the damages suffered by the Cooling Water System have been caused by the higher concentration of sediments in the water, notwithstanding which, CGE persists in trying to blame the Construction Consortium for damages caused by unforeseeable force majeure events concomitant with the extraordinary emergency repeatedly experienced in the Project area, CGE persists in trying to blame the Construction Consortium for flaws caused by unforeseeable events of force majeure concomitant with the extraordinary emergency repeatedly experienced in the Project area during 2006, 2007 and 2008 without even analyzing whether the operation of the Power Plant by Hidropastaza was within the technical parameters required by the specifications or established by the manufacturers of the equipment involved."

b) 5883		
Furnas Association -Integral	06/15/2009	020484
5884		
Marco Antonió Narváez Pínto		
5893	07/29/2009	029049
Germán Bolívar Anda Naranjo		
•	07/28/2009	027877

On the other hand, HIDROPASTAZA, with official letter No. 0436-HPEP-2010 dated July 9, 2010, states that the Cooling Water System ("SAE" by its initials in Spanish), "In 2007, after the execution of the detailed engineering, Hidropastaza and the Consortium exchanged a series of correspondence and held several meetings related to the design of the cooling water system, its performance and water quality conditions. The result of these communications and meetings was the development of a technical feasibility study for a new cooling water system using other water sources, given the unpredictable increase of suspended solids in the Rio Pastaza. On the other hand, due to the wear suffered by the components of the system, the Consortium supplied and installed new valves to capture water from the snails and block the cooling water circuit for the maintenance of the system and valves for the backwashing system of the main filter, in order to optimize the operational availability of the cooling water system, while continuing with the studies and decisions for the implementation of a definitive solution, taking into account the increase in the concentration of solids in suspension in the water of the Rio Pastaza.

After three years of operation, Hidropastaza considers that the cooling system supplied in accordance with INECEL's Basic Design and the technical specifications of the Project that are part of the Concession Contract, should be replaced by a new system that adjusts to the current water conditions of the Rio Pastaza or that contains the necessary devices to mitigate the concentrations of suspended solids that exceed the contractual values foreseen or to obtain the cooling water from another source. Thus, in response to the recommendation of the Comptroller General of the State, the Settlement Agreement contemplates:

- The execution by the Consortium, at its own cost, of a technical, economic and financial study of the feasibility of installing improvement equipment for the current Cooling Water System (SAE) of the San Francisco Power Plant.
- Once the aforementioned studies have been carried out and the execution of said Additional Work has been approved by HPEP, it shall be executed by the Consortium, at its own cost, within a period of two (2) years, as from the date of commencement of the Complementary Works.
- -• As in the case of the impellers, the Consortium will assign to HPEP the warranties of the manufacturers of the electromechanical equipment that will integrate said SAE and will grant a warranty for the civil works and equipment included in the new SAE for twenty-four (24) months from the delivery of said additional work"
- IV. After analyzing both the special examination report and the background memorandum registered in the file under number 029-2009, as well as the communications and evidence submitted, it is concluded that: The basic design of the works, on the basis of which the San Francisco Hydroelectric Project was built, corresponds to the constant design in the pre-contractual documents delivered by ex-INECEL, first during the bidding process for the concession of the project between CONELEC and HIDROPASTAZA and, later, for the construction of the project between HIDROPASTAZA and the Construction Consortium.

The aforementioned basic design, which is an integral part of the Concession Contract signed by OONELEC on behalf of the Ecuadorian State, was also incorporated into the construction contract signed between HIDROPASTAZA S.A. and the Construction Consortium, without any change or addition, since it could not be modified without the express knowledge and authorization of the Grantor, as provided by the Electricity Sector Regime Law.

The purpose of the construction contract is the detailing, supply and construction of the basic design provided by the Grantor for the execution of the San Francisco Project.

Paragraph.3.1 of the Construction Contract states:

"The scope of works for the Works shall include the Detailed Engineering of the Basic Project, the supply, assembly, construction and testing, commissioning and start-up of the Works. The Works shall be developed in accordance with: (i) the Basic Project, (ii) the Project Optimization defined in Section 3.2, (iii) the changes or improvements agreed between the Parties pursuant to Section 8 of this Contract, if any, (iv) the Specifications included in the Concession Contract and (v) the Ecuadorian or other applicable norms and standards agreed between the Consortium and the Concessionaire".

From the aforementioned clause, it is evident that the Construction Consortium had the obligation, among others, to carry out the "detailed engineering of the basic project", and "the optimization of the project defined in paragraph 3.2"; which does not include the execution of hydrology, sedimentology, volcanology or geotechnical studies, which in due time were executed by INECEL, confirmed by CONELEC and which served as the basis for the conception of the San Francisco Project. These basic studies take a considerable period of time and comprise the monitoring the behavior of the Rio Pastaza basin, with respect to the sediment content of the rivers of the respective sub-basins and micro-basins that deposit, contaminate and drag the waters into the Rio Pastaza, which are the source for the operation of the Agoyán and San Francisco; as well as the behavior of the active volcano Tungurahua, linked to volcanic events and earthquakes; statistical information that was the basis for the designs of the San Francisco project.

CONELEC decided to eliminate the Rio Verde waterfall from the scope of the project, thus preserving the waterfall known as "Pailón del Diablo", which was requested by the communities of Baños de Agua Santa and Río Verde and environmental aspects, so the construction consortium was asked to design the project in detail, including the modifications derived from the elimination of the Rio Verde waterfall and the postponement of the construction of the Agoyán - San Francisco by-pass to 2012.

The Concessionaire (CONELEC), by means of official letter No. DE-04-0112, requested directly to the Concessionaire (HIDROPASTAZA) the presentation for the approval of the modifications to be made, concerning the hydro-electromechanical equipment considered in the Report presented by the Odebrecht Alstom-VaTech Construction Consortium, so that HIDROPASTAZÁ S.A. may issue the manufacturing order.

HIDROPASTAZA formalized the order to the Construction Consortium to manufacture all the hydroelectromechanical equipment required for the San Francisco Power Plant, once CONELEC's approval was obtained, and signed the Second Modification to the Concession Contract, including these changes. The scope of the optimization of the project includes the modifications arising from the exit of the Rio Verde catchment and some changes in the construction methodology, such as: the use of the mechanical topo (TBM - Tunnel Boring Machine) for the excavation of the conduction tunnel; adoption of linings/supports with prefabricated segments in the conduction tunnel; change of location and section of window 4; change of slope of the pressure pipe; increase of the section of the access tunnel to the bifurcator to allow the

#### **AFFIDAVIT**

I, Juan F. Alban-Naranjo, under penalties of perjury, declare:

Juan F. Alban-Navanjo

- 1. My name is **Juan F. Alban-Naranjo**, I am over the age of eighteen (18) years, and I am competent to make this affidavit. The statements contained herein are true and correct.
- 2. I am certified as a Spanish<>English interpreter by the state court systems in Florida and California.
- 3. I am an experienced bilingual translator who is fluent in both the English and Spanish languages.
- 4. Pursuant to Florida Statute § 90.606, I translated the item below from Spanish to English to the best of my knowledge, ability and belief and the translations are in fact true and accurate.

See Exhibit "A" attached hereto

5. I have no affinity or consanguinity with the participants of the translated document.

Pursuant to Florida Statute § 92.525(2), under penalties of perjury, I declare that I have read the foregoing Affidavit and that the facts stated in it are true.

Juan F. Alban-Naranjo	DATE	
STATE OFTexas		
COUNTY OF		
Sworn to (or affirmed) and subscribed before me or	April 1, 2024, by Juan F. Alban-Naranjo.	
Sue L Nix	Sue L Nix	
NOTARY PUBLIC, or other person authorized	Printed, typed or stamped commissioned name	
to administer an oath	of Notary Public	
	Sue L Nix	
	ID NUMBER	
	132369934	
o Personally known	COMMISSION EXPIRES February 21, 2028	

Type of identification produced: Florida Driver's License A-415-426-70-0570

### Exhibit "A"

- 1-1, Resolution No. 2446, August 26, 2010
- 1-2, Resolution No. 2448, August 27, 2010
- 1-3, Resolution No. 2449, September 1, 2010
- 1-4, Resolution No. 2450, September 1, 2010
- 1-6, Resolution No. 2452, September 1, 2010
- 1-7, Resolution No. 2453, September 1, 2010
- 1-8, Resolution No. 2454, September 1, 2010